GOVERNMENT OF INDIA
WATER RESOURCES
LOK SABHA

UNSTARRED QUESTION NO:211
ANSWERED ON:13.08.2007
RECEDING GANGA GLACIER
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Will the Minister of WATER RESOURCES be pleased to state:

(a) whether the Gangotri Glacier, the origin of river Ganga, is receding rapidly;

(b) if so, the details thereof;

(c) whether any assessment has been made about the availability of water annually in the Ganges in the context of receding of the glacier; and

(d) if so, the details of existing storage capacity for storing the water of river Ganga?

Answer

MINISTER OF THE STATE IN THE MINISTRY OF WATER RESOURCES (SHRI JAI PRAKASH NARAYAN YADAV)

(a) to (d) As reported by the Geological Survey of India (GSI), the Gangotri glacier is about 30.20 km long covering an area of 143.58 sq.km. and as per the latest study results Gangotri glacier has receded at the rate of 18.80 m. per year during 1935-1996. The glacier has receded by 1.147 sq. km. in 61 years and vacated an area of 0.57208 sq. km i.e. 0.0093 sq. km per year.

As per GSI, if the present scenario of receding glaciers is accelerated, there may be some reduction in the river discharge. However, it may be noted that the major part of the river discharge is contributed by snow fall and precipitation which is likely to go up with global warming. The continuous retreat of glaciers may lead to marginal shortage of water in the Himalayan rivers. However, it may be mentioned that the major part of the glacier melt runoff is released during June-September period which is the time for monsoon activity. Thus, marginal decrease in glacier contribution may be compensated by increased monsoon activity.

Storage capacity of about 42.06 billion cubic metre (BCM) has so far been created through various projects in Ganga basin.